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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------|----------------------|-------------------------|------------------|
| 10/028,303 12/28/2001 | | Ralph H. Johnson | M40 02461 US | 2895 |
| 7 | 590 08/13/2003 | • | | |
| Andrew A. Abeyta | | | EXAMINER | |
| HONEYWELL INTERNATIONAL INC. 101 Columbia Road | | | DAVIE, JAMES W | |
| POB 2245 Morristown, NJ 07962 | | • | ART UNIT | PAPER NUMBER |
| • | | | 2828 | |
| | | | DATE MAILED: 08/13/2003 | 1 |

Please find below and/or attached an Office communication concerning this application or proceeding.

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| • | Applicati n N . | Applicant(s) | | | |
|---|-------------------------|--|--|--|--|
| Office Action Commence | 10/028,303 | JOHNSON, RALPH H. | | | |
| Office Action Summary | Examin r | Art Unit | | | |
| | James W Davie | 2828 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address PridfrRply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | |
| 1) Responsive to communication(s) filed on 28 L | December 2001 . | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ Th | is action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disp sition of Claims | | | | | |
| 4)⊠ Claim(s) <u>1-21</u> is/are pending in the application | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>1-21</u> is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. Application Papers | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | |
| Certified copies of the priority document | s have been received. | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | |
| a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal | y (PTO-413) Paper No(s) Patent Application (PTO-152) | | | |

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DETAILED ACTION

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Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The instant claims are indefinite for the following reasons.

- (a) In claim 1, lines 8-9, "wherein said second mirror includes deep elemental traps that form a current confinement structure in said second mirror" fails to define the structure necessary to accomplish the intended result. It is not clear as to what structure applicant intends to claim and thus claims 1-8 are rendered indefinite.
- (b) In claim 9, lines 9-10, "wherein said spacer includes deep elemental traps that form a current confinement structure" fails to define the structure necessary to accomplish the intended result. It is not clear as to what structure applicant intends to claim and thus claims 9-15 are rendered indefinite.
- (c) In claim 16, lines 9-10, "wherein said array includes a plurality of deep elemental trap regions that form current confinement structures that guide current from said plurality of second contact layers into said plurality of active regions" fails to define the structure necessary to accomplish the

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intended result. It is not clear as to what structure applicant intends to claim and thus claims 16-21 are rendered indefinite.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W Davie whose telephone number is (703) 308-4847. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

James W Davie Primary Examiner Art Unit 2828

August 8, 2003

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